

Meeta Gera (Ph.D, Postdoc)

Research Associate

Department of Biochemical Engineering and Biotechnology

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CAREER OBJECTIVE: To contribute to the growth of an organization using my strong educational and experimental background working in challenging Research Projects and to explore my potentials to the best of my ability in conjunction with the institution's goal and objectives.

EDUCATIONAL QUALIFICATION:

Ph.D.,	12/2012 –05/2016	Materials and Devices , Nano materials (Synthesis & Characterization of metal nanoparticles), Biosensors, Amity Institute of Advanced Research and Studies, Amity University, Noida, India.
M. Sc.,	05/2009- 04/2011	Biotechnology , Department of Life Science, Boston College of Professional Studies, Jiwaji University (M.P.) India.
B. Sc.,	05/2006- 04/2009	Biotechnology , College of Life Sciences, Cancer Hospital and Research Institute, Jiwaji University (M.P.), India.

WORK EXPERIENCE:

Post-Doctoral Fellow	06/06/2016-23/07/2018	Department of Animal Biotechnology, College of Applied Life Sciences, Jeju National University, South Korea.
Doctoral Research	08/12/2012-17/04/2016	Amity Institute of Advanced Research and Studies, Amity University, Noida, India.
Research Assistant	08/08/2011-10/11/2012	Amity Institute of Advanced Research and Studies, Amity University, Noida, India.

AWARDS AND ACHIEVEMENTS:

Best Oral Presentation Award at SRMS International Conference on Science and Technology-2015 (Exploring the potential of convergence) from 27th to 28th Feb, 2015 at the SRMS College of Engineering and Technology, Bareilly, U.P., India.

International Travel grant fellowship awarded by CSIR, HRDG group, New Delhi for attending the 5th BSRT PhD Symposium: "What to learn from Cancer and Development" at Berlin-Brandenburg School for Regenerative Therapies (BSRT) during 03-05th December, 2014, Berlin, Germany.

RESEARCH SKILLS:

Nanotechnology – Preparation and Characterization of metal nanoparticles, polymeric nanocomposite based membranes and porous materials, Development of Nano biosensors, Bio-

batteries and device fabrication, Field-emission Scanning electron microscope, High-resolution transmission electron microscope, Dynamic light scatter particle size analyzer, X-ray diffraction analyzer, UV-Visible Spectrophotometer.

Molecular biology: DNA and RNA extraction from tissue and cells, cDNA synthesis, PCR primer construction, q-RTPCR, Cloning and Recombinant DNA methods.

Cell culture techniques – Cancer stem cells culture, Maintenance of cell lines, Cell cytotoxicity (MTT, Wst), Apoptosis assay (FACS analyzer), Cell migration test, Hoechst staining, Immunostaining, Cell cycle analysis.

Biophysical and Bioanalytical techniques – Chromatography (TLC and paper), Protein estimation, Thromboelastography (TEG analysis), Protein SDS-PAGE Electrophoresis, Western blotting.

PUBLICATIONS:

1. Do Luong Huynh, Hyebin Koh, Nisansala Chandimali, Jiao Jiao Zhang, Nameun Kim, Tae Yoon Kang, Mrinmoy Ghosh, ^{Suman Nagpal, Meeta Gera, Ramesh Kumar, V.K. Jain.} Meeta Gera, Yang Ho Park, Taeho Kwon, Dongkee Jeong. BRM270 inhibits the proliferation of CD44 positive pancreatic ductal adenocarcinoma cells via downregulation of Sonic Hedgehog Signaling. Evidence-Based Complementary and Alternative Medicine. 2019. [IF-1.93].
2. **Meeta Gera**, Nameun Kim, Mrinmoy Ghosh, Neelesh Sharma, Nisansala Chandimali, Heybin Koh, Jiao Jiao Zhang, Tae yoon Kang, Yang Hoo Park, Taeho Kwon and Dongkee Jeong. Synthesis and evaluation of the antiproliferative efficacy of BRM270 phytocomposite nanoparticles against human hepatoma cancer cell lines. Materials Science and Engineering: C. 2018. [IF-5.9].
3. Mrinmoy Ghosh, Neelesh Sharma, **Meeta Gera**, Nameun Kim, Simrinder Singh Sodhi, Krishnakath Pulicherla, Do Luong Huynh, DC Kim, Jiao Jiao Zhang, Taeho Kwon, KT Do. The first comprehensive description of the expression profile of genes involved in differential body growth and the immune system of the Jeju Native Pig and miniature pig. Amino Acids 4 (2018) 5:1-7. [IF-2.9].
4. Do Luong Huynh, Jiao Jiao Zhang, Nisansala Chandimali, Mrinmoy Ghosh, **Meeta Gera**, Nameun Kim, Yang Ho Park, Dong Kee Jeong. SALL4 suppresses reactive oxygen species in pancreatic ductal adenocarcinoma phenotype via FoxM1/Prx III axis. Biochemical and Biophysical Research Communications 503, no. 4 (2018): 2248-2254. [IF-2.46].
5. Zhang, Jiao, Xian Wang, Taeho Kwon, Do Huynh, Nisansala Chandimali, Nameun Kim, Tae Kang, **Meeta Gera** et al. "Innovative Approach of Non-Thermal Plasma Application for Improving the Growth Rate in Chickens." International journal of molecular sciences. 19, no. 8 (2018): 2301. [IF-3.68].
6. Mrinmoy Ghosh, Neelesh Sharma, **Meeta Gera**, Nameun Kim, Jiaojiao Zhang, Tae Sun Min, Simrinder Singh Sodhi, Min Bae Kim, VPB Rekha, Sukmin Ko, Dong Kee Jeong. Insights of phytase-containing transgenic Lemna minor (L) as a novel feed additive. Transgenic Research (2018), 27:211-224 [IF-2.46]
7. Mrinmoy Ghosh, Neelesh Sharma, Amit Singh, **Meeta Gera**, Krishna Kanth Pulicherla, DongKee Jeong. Transformation of animal genomics by next-generation sequencing technologies: a decade of challenges and their impact. Critical Reviews in Biotechnology (2018), 1-19 [IF-6.54]
8. Suman Nagpal, **Meeta Gera**, Ramesh Kumar, V.K. Jain. Nano Curcumin a novel herbal drug enhanced apoptosis and inhibit Ehrlich ascites tumor cells *in vivo*. World Journal of Pharmacy and Pharmaceutical Sciences (2018), 7(3), 670-680.

9. Taeho Kwon, Nisansala Chandimali, Yesol Bak, Do-Yound Yoon, Do Luong Huynh, Jiao Jiao Zhang, **Meeta Gera**, Mrinmoy Ghosh, Nameun Kim, Yang Ho Park, Dong Kee Jeong. BRM270 inhibits cancer stem cell maintenance via microRNA regulation in chemoresistant A549 lung adenocarcinoma cells. *Cell Death and Differentiation*. (2018), 9:244, pp. 1-9 [IF-5.1]
10. Hyebin Koh, Hyeri Park, Nisansala Chandimali, Do Luong Huynh, Jiao Jiao Zhang, Mrinmoy Ghosh, **Meeta Gera**, Nameun Kim, Yesol Bak, Do-Young Yoon, Yang Ho Park, Taeho Kwon, Dong Kee Jeong. MicroRNA-128 suppresses paclitaxel-resistant lung cancer by inhibiting MUC1-C and BMI-1 in cancer stem cells. *Oncotargets*. (2017), 8(66), pp. 110540. [IF-5.1]
11. **Meeta Gera**, Neelesh Sharma, Mrinmoy Ghosh, Do Luong Huynh, Taeho Kwon, Sung Jin Lee, Taesun Min, Dong Kee Jeong; “Nanoformulations of curcumin; an emerging paradigm for improved remedial application”; *Oncotargets*, 2017, 8(39): 66680. [IF-5.1]
12. Do Luong Huynh, Taeho Kwon, Jiao Jiao Zhang, Neelesh Sharma, **Meeta Gera**, Mrinmoy Ghosh, Nameun Kim, Somi Kim Cho, Dong Sun Lee, Yang Ho Park, and Dong Kee Jeong. Wogonin suppresses stem cell-like traits of CD133 positive osteosarcoma cell via inhibiting matrix metalloproteinase-9 expression. *BMC Complementary and Alternative Medicine*, 17, no. 1 (2017): 304. [IF-2.1]
13. **Meeta Gera**, Ramesh Kumar, Vinod Kumar Jain, Suman. Preparation of Novel Nanocurcumin loaded drug releasing medicated patch with enhanced bioactivity against microbes. *Advanced Science Engineering and Medicine*, Vol.7, 1-7, 2015.
14. **Meeta Gera**, Amit Chauhan; “Detection of malaria parasite using different microscopic methods and a comparison among them”; *International Journal of Science and Research*, vol.4, 1635-38; 2015.
15. **Meeta Gera**, Ramesh Kumar, V. K. Jain and Suman; “Fabrication of a pocket friendly, reusable water purifier using silver nano embedded porous concrete pebbles based on green technology” *Journal of Bionanosciences*; vol.8,1-6;2014. [IF-1.17]
16. Suman, Abhishek Kardam, **Meeta Gera**, V.K. Jain, “A novel reusable nanocomposite for complete removal of dyes , heavy metals and microbial load from water based on nanocellulose and silver nano-embedded pebbles”; *Environmental technology*,1-9;2014. [IF-1.75]

MANUSCRIPTS COMMUNICATED:

1. Mrinmoy Ghosh, **Meeta Gera**, V. Girija Shankar. Recrafting the persistent diversity of marine psychrotolerant actinomycetes in the deep of Bay-of-Bengal Ocean: as outperform resource for pharmaceutical and industrial macromolecules. *Journal de Mycologie Medicale*. (Submitted).

PATENTS FILED:

1. Suman, Sandeep Nagar, **Meeta Gera**, Somik Chakravarty, Prashant Shukla, Abhishek Verma, V K Jain. Power generation based on optically excited plasmons suspended in water using rechargeable battery. **Application 492/DEL/2013**, filed on 21/02/2013 under the Patents Act 1970, Government of India.
2. Suman, Prashant Shukla, **Meeta Gera**, Vinod Kumar Jain. A method for preparation of paper battery using graphene and silver nano composite. **Application 3268/DEL/2012**,

filed on 22-10-2012.

3. Abhishek Kardam, Suman, **Meeta Gera**, V.K.Jain. Nanocellulose and silver nano embedded pebble based composite for complete removal of dyes, heavy metal and microbial contamination from water. **Application 1556/DEL/2013**, filed on 2013-5-24.

CONFERENCE ATTENDED:

1. Mrinmoy Ghosh, Nameun Kim, **Meeta Gera**, JiaoJiao Zhang, Do Luong Huynh, Taeho Kwon, and Dongkee Jeong*. An Approach of Nutrigenomic Study of Jeju Native Pig and Doroc to Define the Correlation between Feed Supplement and Regulation of Genes on the Back Fat Deposition. International Conference Korean Society for Molecular and Cellular Biology, 2017, September 12- 14.
2. Mrinmoy Ghosh, Nameun Kim, Jiaojiao Zhang, Do luong Huynh, **Meeta Gera**, Taeho Kwon and Dong Kee Jeong*. Comparative transcriptomic analysis of Meat quality-Associated Differentially Expressed Genes by RNA-seq Data on Korean Native Chicken, Broiler and Leghorn in Breast muscle. The 33rd Annual General Meeting and Conference of the Korean Gold Council, 2016.11, 73-75.
3. Do Huynh Luong, Neelesh Sharma, Nameun Kim, Jiao Jiao Zhang, Nisansala Chandimali, Mrinmoy Ghosh, **Meeta Gera**, Taeho Kwon, Dongkee Jeong*. Isolation of bovine mammalian epithelial cell from Korean Holstein dairy cattle and its biopotential in antibacterial protein production. The 36th Annual Meeting of the Korean society of Developmental Biology, 2017, 8, 52-52.
4. **Meeta Gera**, Vinod kumar Jain, Suman, Electrostatically Functionalized Graphene oxide Based Enzymatic Biosensor for detection of Lactic acid in Serum; SRMS International Conference on Science and Technology-2015 (Exploring the potential of convergence) from 27th to 28th Feb, 2015 at the SRMS College of Engineering and Technology, Bareilly, U.P., India.
5. **Meeta Gera**, V K Jain, Suman, Electrostatically Functionalized Graphene oxide Based Enzymatic Biosensor for detection of Lactic acid in Serum; 4th International Science Congress (ISC-2014), 8th - 9th December 2014 at Pacific University, Udaipur, Rajasthan, India.
6. Suman, Prashant Shukla, **Meeta Gera**, Vinod kumar Jain, Power generation using graphene and silver nano composite based paper battery; 17th International Workshop on the Physics of Semiconductor Devices 2013; 517-519.
7. **Meeta Gera**, V.K.Jain, Suman; Development of Lactate Biosensor Based on Electrostatically Functionalized Graphene Oxide Bound Lactate Oxidase; 17th International Workshop on the Physics of Semiconductor Devices 2013; 413-415
8. **Meeta Gera**, Ramesh Kumar, Vinod Kumar Jain, Suman, Development of Nanocurcumin coated drug releasing bandages and their biomedical applications; International conference of NANOCON-012, Bharati Vidyapeeth University, PUNE.

PROJECTS HANDLED AND TRAININGS:

1. Project training on “Detection Of Malaria Parasites By Using Different Microscopic Methods And A Comparison Among Them” from dept. of Microbiology (PARASITOLOGY LAB), **AIIMS, NEW-DELHI** from 1st April – 30th June. 2011).
2. Training Program on “Plant Tissue Culture Techniques” from MPCST-Bhopal (28 Nov.- 03 Dec. 2007).
3. Summer training of 15 days on the topic of “Microbiological Analysis Of Confectionary Product” from Cadbury India Lmt. Gwalior.
4. Summer training of 15 days on the topic of “Treatment Of Municipal Wastes & Industrial

- Effluents” from J.B. Mangharam Foods Pvt.Ltd, Gwalior.
5. “NANOTECHNOLOGY-2008” a National Seminar on Biotechnology held in CHRI Gwalior (M.P.).
 6. National Symposium on “TRANSLATIONAL RESEARCH IN HEALTH SCIENCES” held in AIIMS-New Delhi.
 7. National Seminar on “BIOTECHNOLOGY & HEALTH: PROSPECTS & PERSPECTIVE IN 21TH CENTURY” held in ITM Universe-Gwalior (M.P.)

PERSONAL DETAILS:

Date of Birth: 08-10-1988

Marital status: Unmarried

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REFERENCES:

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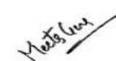
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DECLARATION:

I hereby declare that the above-mentioned information is correct to the best of my knowledge and I hold the responsibility for the correctness of the above particulars.

Place: Faridabad

Date: 29-04-2019



MEETA GERA